



Dodd-Frank Section 1502 Post-filing Supply-Chain Survey (2015)

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Study Protocol

January 19, 2015

The 5 Ws:

What:

This cross-sectional study will set out to measure the impact of Dodd-Frank Section 1502 on the 3TG (Tin, Tungsten, Tantalum and Gold) market's upstream and downstream supply chain.

Why:

Section 1502 of the Dodd-Frank *Wall Street Reform and Consumer Protection Act* requires reporting by "issuers," or, in sum, publicly traded companies. However, Section 1502 affects all companies in the 3TG supply chain of these public issuers, including non-U.S. companies, private companies, and other public issuers. In order for issuers to follow Section 1502 and conduct a Reasonable Country of Origin Inquiry (RCOI) and, if required, perform due diligence, their entire supply chain also must be engaged and relied upon. This survey follows up Tulane's Dodd-Frank Section 1502: Post-Filing Survey 2014 which targeted issuers. Now the focus is on the rest of the upstream and downstream 3TG supply chain.

When:

Data will be collected April to June 2015.

Where:

3TG supply chains are global. As the survey is online-based, the questionnaire can be completed by the companies themselves.

Who:

The survey respondents are companies throughout the 3TG supply chain: mine to smelter (upstream), smelters/refiners, and downstream, all the way to OEMs.

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I. Introduction

In 2010, an unprecedented disclosure law in the US – concerning a human rights issue half-way around the globe by targeting mineral-consuming companies – was signed into law as a part of the *Dodd-Frank Wall Street Reform and Consumer Protection Act*. The stated rationale behind this “miscellaneous provision” was that due diligence and public disclosure might curtail revenue flowing to armed groups perpetuating conflict and atrocities in the Democratic Republic of the Congo.

From June to August 2014, mainly public issuers participated in Tulane’s 2014 survey to gauge the impact of Dodd-Frank Section 1502 on the U.S. market. The question however remains how the law is affecting the rest of the upstream and downstream supply chain, from the mines in the DRC and neighboring countries to suppliers who are not public issuers subject to the SEC Rule. Envisioned is thus a tri-lingual (English, French and Mandarin) cross-sectional survey to capture also the perspective of all other 3TG supply chain actors.

II. Goal

To obtain scientific, impartial, representative findings on the impact of Dodd-Frank Section 1502 (DFS1502) on affected 3TG-consuming markets. Companies affected by the law are invited to share their experiences.

III. Research objectives

1. Establish a baseline estimate of each 3TG tier size in terms of number of entities and financial volume;
2. Assess impact of DF S1502, since its rule operationalization by the SEC, in terms of how it has affected the 3TG market, including changes in expectations and standards, as well as effects in terms of costs, benefits and other collateral impacts.

IV. Survey themes

This company-centric survey will shed light on the following themes:

1. Mapping of 3TG market’s supply chains
2. Due diligence
3. Traceability system (if any)
4. Human resources dedicated to Conflict Mineral Program/due diligence
5. IT/documentation
6. Data quality
7. Effects on upstream and downstream supply chains
8. Synergy (B2B, inter-agency)
9. Issues / challenges
10. Good Practices

V. Survey methods

a. Study design

A cross-sectional study design, featuring simple random sampling, has the distinct advantage of ensuring representation, extrapolation, and generalizability of findings. This design permits a post facto ‘snapshot’ on a number of indicators as experienced by the particular target population. This method furthermore enables a large number of observations and, thanks to the online survey platform, query respondents who are geographically scattered.

b. Unit of analysis

The study’s unit of analysis is the formally registered company operating in the 3TG market, with the exception of miners in the DRC. These stakeholders, i.e. the approximately 750,000 to 2,000,000 miners working in the DRC’s artisanal and small-scale mining (ASM) sector, are also eligible, although they may or may not be operating in a formal capacity as a registered company.

c. Sampling methods

Thousands of companies are affected by Dodd-Frank Section 1502 in a myriad of sectors and industries. 3TG minerals classified as “conflict minerals” are ubiquitous: tin is added to shoe soles, tantalum to ball point pens, gold used to make pregnancy tests, to name a few examples.

Tulane will adopt a multi-pronged approach to obtaining the data, namely opportunity sampling and snowball sampling. First, Tulane will invite publicly-identified affected companies to participate in the survey via email and phone calls, and the Stakeholder Forum members will be requested to reach out through their respective networks to drum up as much participation as possible. Second, the snowball sampling method will be employed in that each survey participant will be asked to pass on the survey to a few of their suppliers.

d. Target population and respondents

The target population of this study is the company which self-identifies as being a commercial entity in the 3TG supply chain. *Table 1* below notes the type of company in each 3TG mineral consuming sector, 12 levels in all.

Table 1:

	level	type of company	3TG			
			Tun	Tin	Tan	Gold
Upstream (levels from mine)	1	mining	✓	✓	✓	✓
	2	regional trading (négociant)	✓	✓	✓	✓
	3	Intermediate processor*	✓	✓	✓	✓
	4	consolidators (comptoir)** / exporter	✓	✓	✓	✓
	5	international trader	✓	✓	✓	✓
	6	concentrate & mineral re-processor	✓	✓	✓	✓
SOR	7	smelter / refiner	✓	✓	✓	✓
Downstream (levels from smelter)	8	distributor / exchange	✓	✓	✓	✓
	9	materials processor	✓	✓	✓	✓
	10	component / sub-assembly manufacturer	✓	✓	✓	✓
	11	contract manufacturer	✓	✓	✓	✓
	12	original equipment manufacturer (OEM)	✓	✓	✓	✓

* In the DRC for 3T this is only physical/mechanical separation, e.g. flake/shave processing

** Comptoirs, legally, no longer exist

With respect to the specific respondents, internally designated company employees or managers are requested to complete this questionnaire, i.e. not external consultants. Also, to mitigate possible bias or misinformation, we request that the respondent take the time to accurately report the answers. To confirm that the titles reflect internal staff positions, we will ask for the title of the respondent as a control measure.

e. Survey instrument

The survey instrument, to be completed by 3TG-producing/procuring/consuming companies from the mine to Tier 1 suppliers, is drafted by Tulane, and was improved based on feedback from the stakeholder forum. The tri-lingual survey instrument (English, French and Mandarin) will then be hosted online with Qualtrics.

The online survey platform permits one response per company. Companies may choose to remain anonymous or may seek to reveal their identity. If a company wishes to re-do its submitted questionnaire it may do so by contacting the study's PI.

f. Data Analysis

A mixed methods data analysis approach is undertaken as both quantitative and qualitative data analyses are carried out in this study. First, descriptive statistics and measures of central tendency are calculated. Also, inferential statistics are applied where the sample is representative of the specific tier, in order to infer the experiences and opinions of the target population. Cross tabulation and correlation analyses will also be conducted to investigate the relationship between specific indicators. Comparative analyses between tiers and the two conflict mineral "streams" will also be featured. In addition, differences and similarities between the individual 3TG supply chains will be investigated.

g. Respondent confidentiality

This survey will be conducted by contacting randomly selected companies and inviting them to be surveyed. Qualtrics will be utilized to collect the data electronically. All collected data will be anonymized such that it would not be possible for a non-Tulane researcher to attribute it with any given company or company focal person. Throughout the process, all collected data will be kept confidential by a core team of Tulane researchers.

h. Data ownership and survey products

Within a week or two after upon data analysis, the Principal Investigator will deliver a presentation and make it publically available. As the study is spearheaded from a neutral 3rd party, in order for the survey findings to be credible, Tulane University's Payson Center will maintain ownership of – and have sole access to – the survey's data. Stakeholder Forum members can however pose specific questions to Tulane that were not addressed in the presentation. These inquiries and answers would be turned into a Q&A and be made public. Thereafter, the principal investigator will ready and publish a scientific article.

VI. Survey Team

The following individuals constitute the survey team:

Principal Investigator: Chris N. Bayer, PhD
Research Associates: Kayemba Mvula, MSID and Java Hsu
Quality assurance: Julie Hernandez, PhD

VII. Sponsorship/ Funding

This study is solely at the behest – i.e. the work – of Tulane. There is no sponsor, nor is this study being commissioned. In order for the principals of this survey to remain independent and its findings impartial, no funding is solicited nor accepted.

VIII. Stakeholder Forum

a. Stakeholder Forum raison d'être

Ever since projecting the economic impact of the Conflict Mineral provision in October of 2011, Tulane intended to get to the bottom of the law's effect on the market. In order to maximize survey sensitivity and participation, Tulane will work with a broad-based stakeholder forum (SF).

b. Stakeholder Forum purpose

The Stakeholder Forum is an opportunity for stakeholders of the "conflict minerals" issue to input their perspective and advice into the research process and indicators for this 3TG supply-chain conflict mineral survey, as well as bring questions and concerns to the forum.

c. Anticipated benefit to forum stakeholder members

In general, stakeholders stand to benefit from timely and actionable information. General themes such as the law's impact on a number of areas (cost, miner/traders in region) will be covered, and

stakeholder forum members will be given the chance to suggest indicators and data to collect during the survey. The derived data will yield important insight for all parties concerned.

d. Responsibilities

This Stakeholder Forum will provide input at key junctures in the survey development process, notably at the protocol and instrument development stage. In this manner, a spectrum of interest perspectives is taken into account, however under the aegis of the academic entity, Tulane. Thus, in order to ensure impartiality, credibility of the survey, Tulane will have the last word on all aspects of the study, including the survey instrument and final report.



e. Stakeholder Forum nature and composition

The Stakeholder Forum (SF) is a *pre-competitive* platform. On an invitation basis, issuers and organizations (e.g. industry organizations, NGOs, governmental organizations) have been asked to participate in this Stakeholder Forum. These organizations will advise the survey implementation and help target survey respondents, i.e. commercial actors within the supply chains. See specific Stakeholder Forum invitees in section *k. Stakeholder Forum members* below.

f. Stakeholder Forum Confidentiality

Some stakeholders who have expressed willingness to participate have however indicated that they wish their participation not be publically mentioned. Their confidentiality is their prerogative and shall be respected.

Among SF members and Tulane (individuals as well the entities they represent), discussions are open and pertinent documents are shared. However outside of the SF, discussions and documents would not be disclosed or shared.

g. Stakeholder Forum key contributions to survey

1. The first order of business is for forum members to provide input into the survey protocol and survey instrument;
2. Lastly, diffuse survey invitation (with html link) to supply chain (excluding issuers) within each stakeholder's own network.

h. Review process

Every 2-3 days during the input process (prospectively over a 2 week period), Tulane will send the protocol and instruments individually to each Stakeholder Forum member, who will input suggestions in track changes and revert to Tulane. Three (3) iterations are anticipated, and comment and suggestion will be carefully considered.

i. Expected level of contribution

The expected level of contribution will be a total of 1 hour at a minimum (only reviewing the protocol and instrument and providing feedback), to 10 hours at the maximum (which would include actively participating in conference calls and other communication). Stakeholders will make every effort to be responsive, and if they cannot participate, to promptly notify the Principal Investigator and withdraw.

j. Stakeholder Forum coordinator

Assent Compliance (<http://www.assentcompliance.com/>) kindly offered to serve as the Stakeholder Forum Coordinator. This role would be administrative, such as scheduling and organizing conference calls and encouraging efficient communication within the forum.

k. Stakeholder Forum members

Stakeholder representation will be ensured through the invitation of notable stakeholders in their respective fields from e.g. auditing, legal, IT, NGO, and trade association communities, who together will serve as the “stakeholder forum” of the study.

Actors were purposively selected to join the forum. The Stakeholder Forum participants are recorded in *Table 2* below.

Table 2:

<i>entity</i>	<i>focal person</i>	<i>comment</i>
Issuers		
Motorola Solutions	Mike Loch; Michael.Loch@motorolasolutions.com	
HP	Jay Celorie; celorie@hp.com	
A company which wishes to remain anonymous within the Stakeholder Forum		
IT software/service providers		
Assent Compliance - Saas	Jonathan Hughes; jon.hughes@assentcompliance.com Krystal Cameron; krystal.cameron@assentcompliance.com	
Metric Stream	Swapnil Srivastav; sundara.balaji@metricstream.com	
CDX Systems	Chuck LePard; chuck.lepard@hp.com	
Source Intelligence	Alexandria Bennett; abennett@sourceintelligence.com	
Environ	Aidan Turnbull; aturnbull@environcorp.com	
iPoint-systems	Katie Böhme; katie.boehme@ipoint-systems.de	
Congo groups		
Congolese Chamber of Mines	John Kanyoni; kanyoni@gmail.com; john.kanyoni@metachemltd.com	
Accounting/Auditing/Consulting		
Crowe Horwath	Chris McClure; chris.mcclure@crowehorwath.com	
Deloitte	Kristen Sullivan; ksullivan@deloitte.com	
KPMG	Chuck Riepenhoff; criepenhoffjr@kpmg.com	
Douglas Hileman Consulting	Doug Hileman; djhileman@gmail.com	
Elm Consulting	Lawrence Heim; lheim@elmgroup.com	
Legal		
SRZ	Michael Littenberg; Michael.Littenberg@srz.com	
Civil Society		

University of Zurich	Christoph Vogel; christoph.vogel3@geo.uzh.ch	
Erasmus University Rotterdam	Ben Radley; radley@iss.nl	
Independent advisor	Brad Brooks-Rubin; brad.brooks-rubin@gia.edu	not participating in official GIA capacity
NRTL		
Intertek	Joe Langton; joe.langton@intertek.com	
Industry Groups		
IPC	Fern Abrams; FernAbrams@ipc.org	
ITRI	Kay Nimmo; kay.nimmo@itri.co.uk	
EICC	Michael Rohwer; mrohwer@eiccoalition.org	
PPA		
RESOLVE	Jennifer Peyser; jpeyser@resolv.org	
Government		
US State Department	Eileen Kane; KaneEH@state.gov	serving solely in an advisory capacity

IX. Limitations and anticipated challenges

There are a number of notable challenges we anticipate facing in the implementation of the survey, challenges which will be partly addressed through particular approaches by this survey.

Table 3:

#	challenges	approaches
1.	Only rough estimates of tier size will be possible, given that the typology – based on function within supply chain – still needs to be developed, and only now is non-aggregated data on tiers emerging.	With opportunity sampling and snowball sampling, this survey may offer baseline values on tier size.
2.	Related to the first issue is the difficulty of obtaining a representative sample of each tier type.	Given the lack of defined sample frames, a random sampling methodology is precluded.
3.	Target population responsiveness / refusal rate could be an issue with a global survey such as this.	Stakeholder forum can leverage influence and champion participation and diligent responding.
4.	Data quality and non-disclosure of information is always a tricky issue with voluntary surveys.	Since many stakeholders have a vested interest in the findings that this survey yields, optimism is warranted.
5.	Language gaps could be an issue as 3TG-consuming companies are located all over the world.	The survey will seek to bridge the most salient language gaps by offering the questionnaire also in French and Mandarin.
6.	Lack of internet in DRC	The questionnaire will also be made available in hard copy format through partners in the DRC.

X. Timeframe

The duration of the study, from survey instrument preparation to issuing the final report, is projected to last from April to June 2015. The timeframe for specific tasks to be completed is itemized in the table below. Companies will be given an 8 week timeframe to complete the instrument online. The presentation will be prospectively delivered in August of 2015.

Table 4:

<i>steps</i>	Jan 2015	Feb 2015	March 2015	April 2015	May 2015	June 2015	July 2015	Aug 2015
Invite Stakeholder Forum members	■							
Draft protocol and survey instrument		■						
Invite stakeholder input on protocol and instrument			■					
Translate survey instrument into French, Mandarin				■				
Load the survey onto Qualtrics				■				
Launch survey					■			
Invite survey participation (Tulane and stakeholder forum members)					■			
Answer questions and concerns (of prospective respondents)					■			
Conduct data analysis							■	
Deliver presentation								■
Stakeholder Forum Q&A								■

XI. Contact

For further questions please contact Chris N. Bayer, PhD (cbayer@tulane.edu).